

Proposed Title: Is there a “Knowledge Gap” in what people know about cancer? : How Communication Inequality May Influence Cancer Knowledge

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Research Questions:

RQ1: Are there gaps in cancer knowledge (Risk factors and cancer prevention recommendations) among members from different socioeconomic positions?

RQ2: What are the factors that contribute to knowledge gaps? For example, does unequal access to and use of communications resources and channels likely to contribute to cancer knowledge gaps?

RQ3: What is the relationship between Knowledge and behaviors influencing cancer risks?

Study Description and Rationale:

The Knowledge-Gap Hypothesis posits that as the flow of information on a given topic into a community or social system increases, people from higher socio-economic status are in a better position to take advantage of the information compared to others thus potentially leading to differential knowledge among social groups. In other words it suggests that (a) information is unequally distributed in the system, (b) that those who have access to information are different from those who don't, and, (c) that the differential access in information is a reflection of differential social wealth in the system (Tichenor, Donohue & Olien, 1980, Viswanath & Finnegan, 1996). Therefore given that it is known that people do learn about health from mass media sources, we hypothesized those with higher SES should have greater factual knowledge of cancer risks and prevention practices

The objective of this paper is to explore the relationship between communication inequality, knowledge gaps and cancer health disparities. If knowledge is considered a critical mediating condition for pro-healthy lifestyle, disparities in knowledge could potentially contribute to health disparities. Explication of mechanisms and pathways that lead health disparities could point to potential solutions in eliminating health disparities.

Variable List:

Measures of SES:

spage	First, what is your age?
spgender	Are you male or female?
dm1maina	What is your employment status?
dm2marit	What is your marital status?
dm4hispa	Are you Hispanic or Latino?
dm5race1	What is your race?(1)

dm6educa	Highest grade/year of school completed?
dm7ainco	Is income less than 25K?
dm7binco	Is income less than 20K?
dm7cinco	Is income less than 15K?
dm7dinco	is income less than 10K?
dm7einco	Is income less than 35K?
dm7finco	Is income less than 50K?
dm7ginco	Is income less than 75K?
dm7hinco	Is income 75K or more?

Measures of the Digital Divide:

The next questions are about how often you use radio, newspapers, and other media.

HC-5. Do you or anyone in your household have cable or satellite TV?

HC-6. On a typical weekday, about how many hours do you...

a. watch television?	<input type="text"/>	<input type="text"/>
b. listen to the radio?	<input type="text"/>	<input type="text"/>

HC-7. In the past seven days, how many days did you... ..

a. read a newspaper?	<input type="text"/>	<input type="text"/>
b. read a magazine?	<input type="text"/>	<input type="text"/>

HC-20. Do you ever go on-line to access the Internet or World Wide Web, or to send and receive e-mail?

HC-22. Do you ever go on-line to use the Internet from home?

HC-23. When you use the Internet at home, do you mainly access it through . . .

a telephone modem,	1
a cable or satellite modem,.....	2
a DSL modem,	3
a wireless device [PDA], or	4
some other way? (SPECIFY) _____	91

Proposed Components of the Cancer Knowledge Score (IN order of possible usability):

RELATIVE PREVALENCE

CK-1. Which of the following do you think causes the most deaths each year in the United States? Would you say . . .

auto accidents,.....	1
cigarettes,	2
guns,	3
alcohol, or	4
drug use?	5

PREVENTABILITY

CK-4. Can you think of anything people can do to reduce their chances of getting cancer? Anything

else? [CODE ALL THAT APPLY.]

EAT BETTER/BETTER NUTRITION.....	10	
GET SCREENED FOR CANCER/GET TESTED	11	
DON'T SMOKE/QUIT SMOKING	12	
EXERCISE/EXERCISE MORE.....	13	
STAY OUT OF THE SUN/WEAR SUNSCREEN.....	14	
DON'T DRINK ALCOHOL/DRINK LESS ALCOHOL.....	15	
GET A CHECK-UP/GO TO THE DOCTOR	16	
OTHER (RECORD UP TO 8 SPECIFIES) _____	91	
NO/NOTHING	95	(BOX
CK-3)		
DK.....		(BOX
CK-3)		
RF.....		(BOX
CK-3)		

BOX CK-6

RANDOMLY ASSIGN HALF OF RESPONDENTS TO
GET LIST A AND HALF TO GET LIST B IN CK-13.

LIST A INCLUDES ITEMS a, e, g, i, k, m, & o.

LIST B INCLUDES ITEMS b, d, h, j, l, n, r & s.

ONLY FEMALES, SHOULD GET “k” AND “l” IN CK-
13.

CK-13.I'm going to read you some things that may affect a person's chances of getting cancer. Do you think that [FILL EXPOSURE] increase(s) a person's chances of getting cancer a lot, a little, or not at all or do you have no opinion? (How about [FILL EXPOSURE]?)

	<u>A LOT</u>	<u>A LITTLE</u>	<u>NOT AT ALL</u>	<u>NO OPINI ON</u>
a. smoking	1	2	3	4
b. eating a high-fat diet.....	1	2	3	4
d. exposure to the sun	1	2	3	4
e. pesticides or food additives	1	2	3	4
g. not eating much fiber.....	1	2	3	4
h. not eating many fruits and vegetables.....	1	2	3	4
i. stress	1	2	3	4
j. drinking a lot of alcoholic beverages.....	1	2	3	4
k. being hit in the breast	1	2	3	4
l. having many sexual partners	1	2	3	4
m. having a family history of cancer ..	1	2	3	4
n. being a particular race or ethnicity.....	1	2	3	4
o. not getting much exercise.....	1	2	3	4
r. pollution.....	1	2	3	4
s. radon.....	1	2	3	4

CK-15.Which type of cancer do you think will cause the most deaths in {women/men} this year in the U.S.? Would you say . . .

lung cancer,	1
{breast/prostate} cancer,	2
colon cancer,	3
{cervical/testicular} cancer, or	4
skin cancer?.....	5

FV-4. How many servings of fruits and vegetables do you think a person should eat each day for good health?

[IF R GIVES RANGE, PROBE FOR AN EXACT NUMBER. IF DON'T KNOW, DO NOT PROBE.]

SERVINGS

EX-3. Can exercise help to lower the chances of getting some types of cancer or does exercise not make much difference?

LOWERS CHANCE OF CANCER	1
DOESN'T MAKE DIFFERENCE	2
..... (NEXT SECTION)	

EX-4. Which type or types of cancers, or don't you know?

[CODE ALL THAT APPLY.]

ALL TYPES OF CANCER	10
BLADDER CANCER	11
BREAST CANCER.....	12
CERVICAL CANCER (CANCER OF THE CERVIX).....	13
COLON CANCER.....	14
ENDOMETRIAL CANCER (CANCER OF THE UTERUS)	15
HEAD AND NECK CANCER.....	16
LEUKEMIA/BLOOD CANCER.....	17
LUNG CANCER	18
LYMPHOMA	19
MELANOMA	20
OTHER SKIN CANCER.....	21
ORAL CANCER	22
OVARIAN CANCER.....	23
PANCREATIC CANCER	24
PHARYNGEAL (THROAT) CANCER	25
PROSTATE CANCER	26

RECTAL CANCER.....	27
RENAL (KIDNEY) CANCER.....	28
OTHER (SPECIFY)	91

CC-4. Can you think of any tests that detect colon cancer? Anything else?

[CODE ALL THAT APPLY. IF R DOES NOT KNOW NAME OF TEST,
ENTER DESCRIPTION OF TEST IN OTHER, SPECIFY.]

BARIUM ENEMA	10
BIOPSY	11
STOOL BLOOD TEST/FECAL OCCULT BLOOD TEST ..	12
COLONOSCOPY	13
DIGITAL RECTAL EXAM.....	14
PROCTOSCOPY	15
SIGMOIDOSCOPY.....	16
OTHER (SPECIFY)	91
NO/NOTHING	95

CC-4A. Have you ever heard of a fecal occult or stool blood test?

[IF NEEDED: You smear a small amount of stool on cards at home and send the
cards back to the doctor or lab.]

YES	1
NO.....	2 (CC-15A)

CC-15A. Have you ever heard of a sigmoidoscopy or a colonoscopy?

YES	1
NO.....	2 (CC-26)

CC-27. When would you say the risk of colon cancer is highest, when you're . . .

under 40 years old,.....	1
between 40 and 60 years old, or.....	2
over 60 years old?	3

FOR Women Only – USE or NO?

BC-13. {A mammogram is an x-ray of each breast to look for breast cancer.} At what age are women supposed to start having mammograms?

[IF R SAYS “When a doctor says to,” PROBE FOR AN ESTIMATE OF THE AGE. RECORD “95” IF R DOES NOT GIVE AN AGE.]

|_|_|_|
AGE

WHEN A DOCTOR/HEALTH PROVIDER SAYS TO..... 95

BC-14. In general, once women start having mammograms, about how often should they have them?

For Men Only – USE or NO?

A Prostate-Specific Antigen test, also called a PSA test, is a blood test used to check men for prostate cancer.

PC-3A. Have you ever heard of a PSA or prostate-specific antigen test?

Who was asked these questions? – If not everyone, should we use them at all?

CK-5. What specific changes should people make in their eating habits to reduce their chances of getting cancer?

[CODE ALL THAT APPLY.]

EAT LESS FAST FOOD	10
EAT LESS FAT	11
EAT LESS RED MEAT	12
EAT MORE FRUITS	13
EAT MORE VEGETABLES	14
EAT MORE FIBER	15
STOP DRINKING ALCOHOL/REDUCE ALCOHOL	16
OTHER (SPECIFY)	91

CK-6. You said people should get tested for cancer. What kinds of tests do you have in mind?

[CODE ALL THAT APPLY.]

CLINICAL BREAST EXAM.....	10
COLONOSCOPY/SIGMOIDOSCOPY	11
DIGITAL RECTAL EXAM	12
MAMMOGRAM	13
PAP TEST	14
PSA TEST	15
STOOL BLOOD TEST/FECAL OCCULT BLOOD TEST .	16

X-RAY	17
CT SCAN.....	18
OTHER (SPECIFY)	91

TU-15.How likely do you think it is that the average {male/female} cigarette smoker will develop lung cancer in the future? Would you say that {his/her} chance is . . .

very low,	1
somewhat low,	2
moderate,.....	3
somewhat high, or	4
very high?.....	5

GO TO TU-17.

TU-16.How likely do you think it is that you will develop lung cancer in the future? Would you say your chance of getting lung cancer is . . .

very low,.....	1
somewhat low,	2
moderate,.....	3
somewhat high, or	4
very high?.....	5

TU-17.Overall, how many people who develop lung cancer do you think are cured? Your best guess is fine. Would you say . . .

less than a quarter,.....	1
about a quarter,.....	2
about half,	3
about three-quarters, or	4
nearly all?.....	5

BOX TU-5

IF DO NOT SMOKE, CONTINUE.
IF CURRENT SMOKER, RANDOMLY SELECT HALF
TO ANSWER TU-18 AND HALF TO ANSWER TU-19.

TU-18.Would you say the average smoker has about the same lung cancer risk as a non-smoker, a little higher lung cancer risk than a non-smoker, twice the

non-smoker's risk, 5 times the non-smoker's risk or 10 or more times the non-smoker's risk?

- ABOUT THE SAME AS A NON-SMOKER, 1
- A LITTLE HIGHER THAN A NON-SMOKER, 2
- TWICE AS HIGH AS A NON-SMOKER, 3
- 5 TIMES HIGHER THAN A NON-SMOKER, 4
- 10 OR MORE TIMES HIGHER THAN A NON-SMOKER 5

GO TO NEXT SECTION.

TU-19. Would you say you have about the same lung cancer risk as a non-smoker, a little higher lung cancer risk than a non-smoker, twice the non-smoker's risk, 5 times the non-smoker's risk, or 10 or more times the non-smoker's risk?

- ABOUT THE SAME AS A NON-SMOKER, 1
- A LITTLE HIGHER THAN A NON-SMOKER, 2
- TWICE AS HIGH AS A NON-SMOKER, 3
- 5 TIMES HIGHER THAN A NON-SMOKER, 4
- 10 OR MORE TIMES HIGHER THAN A NON-SMOKER 5

Method of Analysis:

We propose to create an index of Cancer Knowledge that will be regressed on variables measuring SEP, media exposure, media access controlling for such covariates as age, gender and personal experience with cancer.

References:

- (1) Tichenor, P. J., Donohue, G. A., Olien, C. N. Community Conflict & the Press. Beverly Hills, CA: Sage. 1980.
- (2) Viswanath K, Finnegan Jr. JR. The Knowledge Gap Hypothesis: Twenty-Five Years Later. Communication Yearbook 19. 1 ed. 1996: 187-227.